

## ICSIM

## Value Based Pricing: A Research on Service Sector using Van Westendorp Price Sensitivity Scale

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### Abstract

One of the significant features of modern marketing is its consumer-oriented approach. Because of the multiple effects of pricing decisions, the importance of the consumer-oriented approach increases. Accordingly, business organizations have to take into account consumers' perception in their pricing decisions. Van Westendorp Price Sensitivity Meter is one of the price sensitivity methods, which is used to measure price sensitivity of consumers. The responses of four questions in the scale are displayed graphically using plots of cumulative percentages for each question in Van Westendorp PSM.

Three important findings related with pricing can be obtained by this method. These are Optimal Price Point, The Range of Acceptable Price and Indifference Price. In this study, the prices are listed as: optimal price 360 TL, indifference price 345 TL and the range of acceptable price 320 TL - 385 TL. These findings show that the price sensitivity of the university students on private dormitories is high.

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### 1. Introduction

Price, which is one of the strongest marketing tools, has a great impact on consumers' buying behaviors, which cause a direct impact on sales and profitability of the business organizations (Han et al., 2001: 436). Price can directly affect market share, positioning, segmentation and marketing program of the business organizations. In addition, it is a criterion that consumer use to evaluate product and brand and it also has an impact on perception of the consumers (Yükselen, 2008: 275). Price is perceived not just a negative factor, which consumes consumers'

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resources, but perceived as a positive factor, which gives them clue about the product quality (Lichtenstein et al., 1993: 158).

Price has been the most important factor affecting consumers' preferences historically. This reality is still valid among the customers with low income and in poor countries. Although price is the most important factor that affects consumers' preference, especially nowadays the factors such as quality, promotion and distribution etc. have been becoming more important (Kotler et al., 1999: 682-685).

A business organization should consider consumers' standard of judgment, consumers' demand within different price levels and the reasons of price sensitivity (Saxena, 2006: 324). Price sensitivity can be described as consumers' reaction to the price of products or services (Clausen, 2004: 2). There are different factors effecting price sensitivity. (East, Wright & Vanhule, 2008: 273). One of the important factors is the value perceived by consumers.

Price is the easiest factor to be changed in the marketing mix. Determining the price does not require any investment as it is in advertising, product development and establishing a distribution channel. Price change can be done more easily than product and distribution channel change. The elasticity of demand is higher than the elasticity of advertising. Due to these reasons, pricing decision is one of the most crucial decisions of the marketing managers (Eser et al., 2011: 455).

In practice, managers states price by using three basic strategies such as cost-based, value-based and competition-based pricing (Kotler et al., 1999: 699; Eser & Korkmaz, 2011: 155; Verma, 2012: 82; Rao, 2009: 172; Tek, 1999: 476).

Cost-based price strategy; is an easy to use and common technique. In this strategy firstly, the cost of the product or service is examined. The price of a product or service is measured by adding a certain unit of profit to the sum of the cost items such as labor cost, supply cost, indirect expenses or general expenses (Verma, 2012: 82; Eser et al., 2011: 459; Kotler et al., 1999: 699).

Competition-based price strategy; is related with prices of competitors. This strategy is based on the assumption that the consumers evaluate products of a business organization according to the rivals' prices for the similar products (Eser et al., 2011: 466). In competition-based pricing strategy, business organization prices the products based on competitor's price as a primary resource (Hinterhuber, 2008: 42). There are two situations in which the competition-based pricing is appropriate. Firstly, when whole business organizations offer standard products or services; secondly, when there are a few big businesses in the market, which is called oligopoly (Rao, 2009: 173).

Value-based price strategy; the business organization started to use value-based pricing when the rivalry started to increase in the beginning of 1990's. The important thing in this technique is perception of the consumers. In other words, value-based pricing, based on the value attached to product by consumers, is a consumer-oriented pricing technique (Rao, 2009: 173; Altunışık et al., 2006: 180-181). Increasing number of business organizations prices their products or services based on consumers' perceived value. In value-based pricing, business organizations use consumer's perceived value instead of cost of the products or services. In this technique, marketing managers price the product or service with components of the marketing mix. They do not price the products or services before product design and marketing program. In cost-based pricing, business organizations add a certain amount of profit to total product cost and then price the product. Then they have to persuade consumers that the price is appropriate for that certain product. If the price is perceived to be high, business organization have to decrease the price or they have to accept low sale. In both scenarios, the business organization would be disappointed since they can not gain the profit they had expected. On the other side, value-based pricing reverses this process. Business organizations determine the price of a product based on the consumers' perceived value. In other words, pricing is determined by analyzing the needs of consumers and their value perceptions (Kotler et al., 1999: 702).

In different sectors, most of the business organizations use value-based pricing; however this technique is more common in service sector. The aim of value-based pricing is to determine a price, which is appropriate for the quality of the product. In the market, prices can be observed as neither high nor low. Price is determined by considering the cost of buying a product and benefit that will be obtained. Value-based pricing is used by well-known firms such as Walmart, IKEA and Southwest Airlines. These firms have the capacity to offer products with reasonable prices, since organizations are designed to work with low cost in these sectors. Firm adopting value-based pricing maintains consistent prices over time; they use sales, discounts, and other pricing tactics infrequently. Value-based pricing pull consumers into the organizations since the consumers trust the value of the products or services. Consumers prefer value-based pricing, because this technique helps them to find what they need and want

without performing much effort (Ferrell & Hartline, 2011: 248-249).

## 2. Methodology

The population of the study consists of students of Uşak University. The sample of the study consists of 200 students (89 female, 62 male), which are selected by convenience sampling. Students are assumed to have enough knowledge about private dormitories since it is one of the options where they may stay and also they can be informed by their friends who stay in private dormitories. Thus, the students who stay other than private dormitories are also considered as potential participants. Distribution of students by residence is shown in Table 1.

Table 1. Distribution of Students' Residences According to Sex

		RESIDENCE					Total
		Private Dormitory	Public Dormitory	Shared Flat with Friends	Family	Other	
Sex	Female	56	10	12	9	2	89
	Male	8	26	18	5	5	62
Total		64	36	30	14	7	151

Aim of this study is to investigate the price perceptions of university students on private dormitories. The data are collected by a face-to-face questionnaire, which has two parts; demographic characteristics and Van Westendorp Price Sensitivity Meter. Incomplete and imprecise questionnaires are excluded. Therefore the remaining 151 questionnaires underwent further analysis.

There are two approaches to consumer survey regarding pricing. Conjoint analysis, one of indirect approach based on consumer preferences, can be used to determine price response function (Wübker, 2008: 54). Van Westendorp's Price Sensitivity Meter is one of direct techniques for researching price sensitivity. Direct techniques assume that people have some understanding of what a product or service is worth (Pritchard, <http://www.5circles.com/>). Price sensitivity measurement can be used to determine how consumers' perceptions of value are affected by the interaction of price and quality. In addition, PSM also provides clues on how to alter consumers' perceptions of value (Lewis and Shoemaker, 1997: 45).

The main assumption of this method is that consumers can not express only one perfect price for a good or service. Nevertheless, consumers can give information about acceptable price range of a certain product. In pricing decisions; costs, price of rivals and profit expectation must be taken into account in addition to consumer's perceptions. By taking into consideration price perception of consumers and other relevant factors together, more accurate pricing decision can be made. Thus, determining price as an acceptable range can provide flexibility in pricing decisions (Wirthwein, 2008: 95).

Price Sensitivity Meter consists of four questions on a described product prices (Van Westendorp, 1976):

1. At what price would you consider this product so expensive that you would not consider buying it? (Too expensive)
2. At what price would you consider the price of this product so low that you'd question its quality? (Too cheap)
3. At what price would you consider the product starting to get expensive – not out of the question, but you'd need to give some thought to buying it? (Expensive)
4. At what price would you consider the product to be a bargain – a great buy for the money? (Inexpensive).

Firstly, a dormitory, which has average features was defined in the study. Based on the defined one, participants are expected to respond the price sensitivity meter questions of private dormitories. In the questionnaire, prices are set as; the lowest 150 TL, the highest 600 TL. The participants are asked to mark their responds regarding price on the price scale below.

.....	150 TL	200 TL	250 TL	300 TL	350 TL	400 TL	450 TL	500 TL	550 TL	600 TL	.....
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### 3. Analysis and Findings

Firstly, the frequency analyses of four questions are performed to obtain cumulative percentages in SPSS program. However, “the cheapest” and “not expensive” responds’ cumulative percentages are reversed to make sure these curves should intersect in the graph. The result of this process is shown in Table 2.

According to the results, 57% of the participants think that the price of a dormitory less than 250 TL makes them to consider it is so low that they would question the quality. 73% of the participants consider the price less than 300 TL as it is a bargain and a great buy for the money. When the price is 400 TL or more, the number of the participants who consider the price as expensive but they might consider staying there, increases significantly. In addition, 58 % of the participants consider 450 TL as too expensive to buy. However, when the price is 500 TL, the cumulative percentage of the participants increase to 72% who consider it is too expensive to purchase.

Table 2. Cumulative Percentage

	Cumulative Percentage			
	Too Cheap	Inexpensive	Expensive	Too Expensive
150 TL	100,0			
200 TL	71,5	100,0		
250 TL	54,3	87,4	2,0	
300 TL	27,8	72,8	9,9	1,3
350 TL	8,6	32,5	34,4	5,3
400 TL	1,3	9,3	64,2	23,2
450 TL		1,3	90,1	41,7
500 TL			98,0	72,2
550 TL			100,0	80,8
600 TL				100,0

The responses of these questions are plotted on a graph. The vertical axis comprises the cumulative percentage of respondents; whereas, the price points are on the horizontal axis. In the graph, where the “too cheap” and “too expensive” lines intersect, the point is known as the “Optimal Price Point”. According to Van Westendorp (1976), “Optimal price is the price associated with this point represents a price at which resistance against the price of a particular product (too expensive or too cheap) is very low while the percentages iron each other”. In figure 1 “too cheap” and “too expensive” lines intersect at 360 TL which is also called optimal price. The cumulative percentage is found about 9 % at the optimal price point. This result shows that the 91 % of the participants consider the price neither too expensive nor too cheap. However, as Xu (2005) pointed out this optimal price is based on consumers' evaluation.

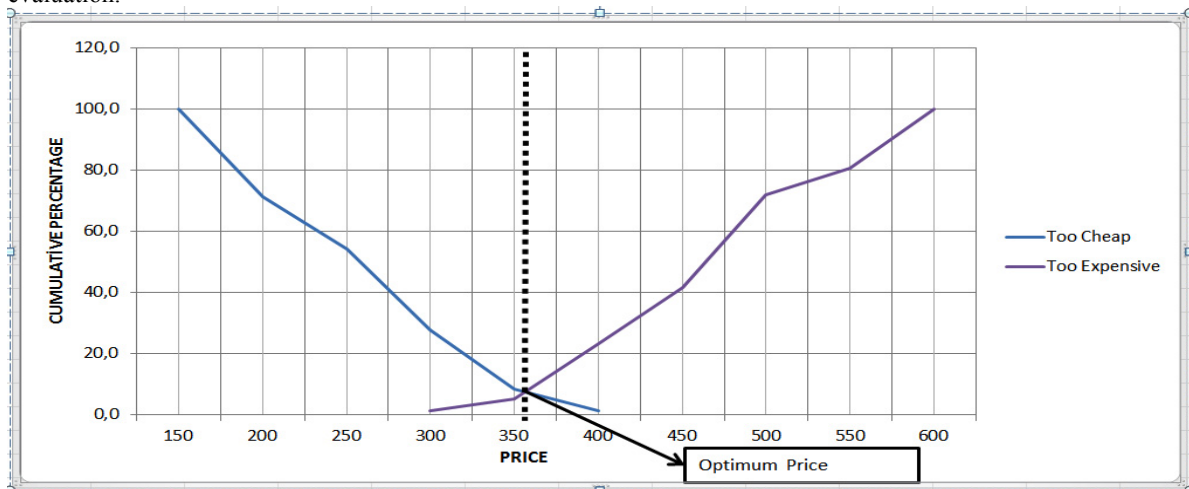


Fig. 1. Optimal Price Point

The range of acceptable price is another value, which can be identified with Van Westendorp's Price Sensitivity Meter. The range of the points where the "Expensive" line and the "Too Cheap" line, and the "Inexpensive" line and the "Too Expensive" line intersect is known as "the range of acceptable price". As it is shown in Figure 2, the range of acceptable price is found as 320 TL - 385 TL in this study. The prices within this range can be considered as quality criteria by consumers, but it does not prevent them buying the product. Yet if the price has a value over the highest limit, it can be considered as too expensive to purchase. On the other hand, the prices lower than the lowest limit of the range of acceptable price, can cause the consumers' doubt about the quality of the product (Lewis & Shoemaker, 1997: 47).

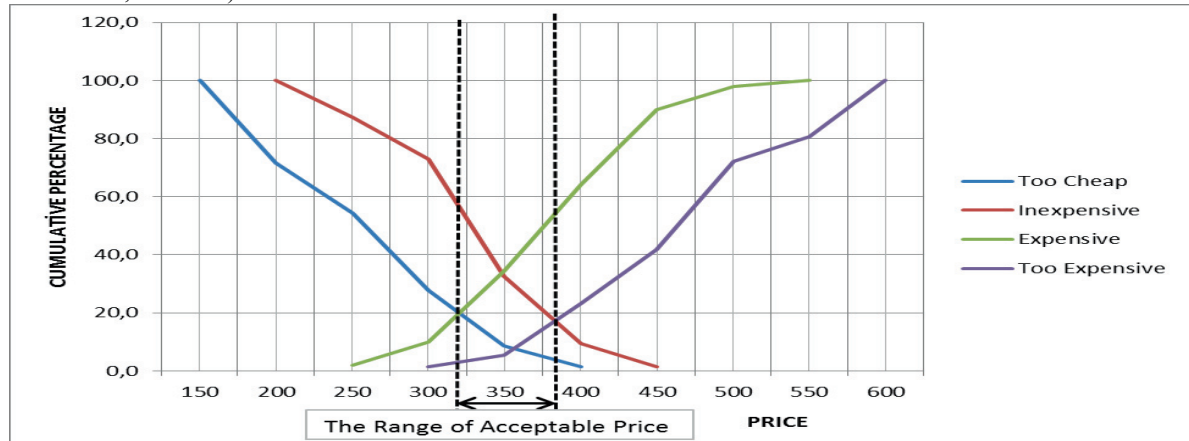


Fig. 2. The Range of Acceptable Price

Lastly, as it is shown in the Figure 3, the point where the "inexpensive" line and the "expensive" line intersect shows the "Indifference Price Point". The indifference price point is found as 345 TL in the study.

Van Westendorp (1976), points out important features of indifference price point (IDP) below:

The IDP generally represents either the median price actually paid by consumers of the product, or the price of the product of an important market-leader.

The IDP can vary for various sub-markets: e.g. people who are especially price-conscious, people who buy cheap or expensive brands etc.

Experiments indicate, that IDP is based upon people's experience with price-levels in the market, it has been shown that IDP will change when conditions on the market change.

Interestingly one can show that IDP's do vary for e.g. people who buy expensive or cheap brands but the differences are by no means as large as one would expect on a basis of an analysis of actual prices of products.

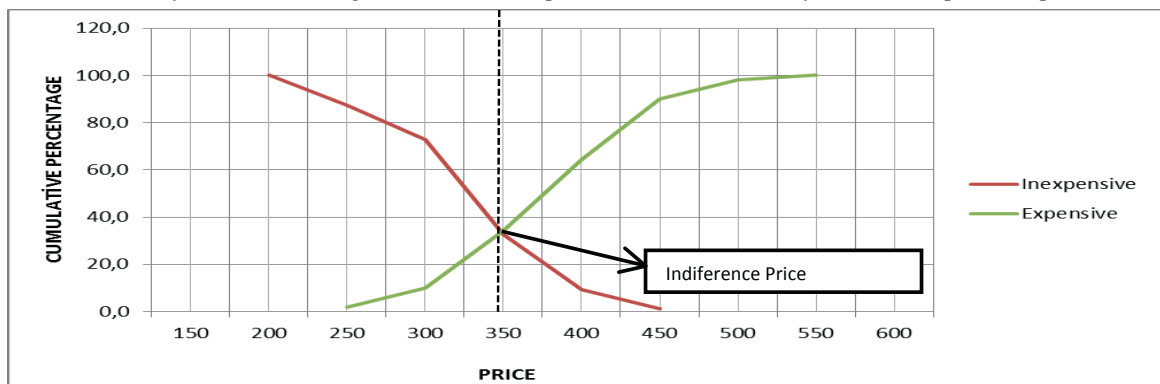


Fig. 3. Indifference Price

#### 4. Conclusion

In this study, value based pricing which is one of the methods of pricing is discussed. Firstly, importance of the price for consumers and business organizations is presented and then value based pricing is examined in detail. In the research, the perceptions of the students on pricing of private dormitories are measured by using Van Westendorp Price Sensitivity Meter. Findings, which are related with price sensitivity such as optimal price, indifference price and the range of acceptable price are obtained.

According to Lewis & Shoemaker (1997: 47), a combination of low indifference-percentage levels and a small acceptable price range suggests a fairly price sensitive market. Indifference Price Point is found as 345 TL and the indifference price point percentage is found about 33 % in the study. Thus, the price sensitivity of the participants can be accepted as high. This results force the dormitory owners to make careful pricing decisions.

The range of acceptable price is found as 320 -385 TL. Optimal price is found as 360 TL in this study. This price is considered as neither too expensive nor too cheap by the consumers. Optimal price is defined based on consumers' perceptions. Therefore private dormitories can decide the most appropriate price if they consider both the range of acceptable price and the other relevant factors.

In this study, Van Westendorp's Price Sensitivity Meter, which is one of the direct techniques of pricing is used. By using both direct and indirect techniques together, comparative studies can be done in the future. Moreover, the studies on different samples and product groups can contribute to the topic with different aspects.

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